## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

10/564,975
IFWP
02/07/2007

## ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 02/07/2007
PATENT APPLICATION: US/10/564,975 TIME: 10:04:58

Input Set : A:\284602.sub.seq.list.081706.txt
Output Set: N:\CRF4\02072007\J564975.raw

3 <110> APPLICANT: INSTITUT PASTEUR

```
ALZARI PEDRO
             BOITEL BRIGITTE
             VILLARINO ANDREA
             FERNANDEZ PABLO
             COLE STEWART
     11 <120> TITLE OF INVENTION: PKNB KINASE AND PSTP PHOSPHATASE AND METHODS OF IDENTIFYING
              INHIBITORY SUBSTANCES
     14 <130> FILE REFERENCE: 284602US0PCT
C--> 16 <140> CURRENT APPLICATION NUMBER: US/10/564,975
C--> 17 <141> CURRENT FILING DATE: 2006-01-18
     19 <150> PRIOR APPLICATION NUMBER: US 60/487,943
     20 <151> PRIOR FILING DATE: 2003-07-18
     22 <160> NUMBER OF SEQ ID NOS: 20
     24 <170> SOFTWARE: PatentIn version 3.2
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 514
     28 <212> TYPE: PRT
     29 <213> ORGANISM: Mycobacterium tuberculosis
     31 <400> SEQUENCE: 1
     33 Met Ala Arg Val Thr Leu Val Leu Arg Tyr Ala Ala Arg Ser Asp Arg
     36 Gly Leu Val Arq Ala Asn Asn Glu Asp Ser Val Tyr Ala Gly Ala Arg
                    20
                                        25
     39 Leu Leu Ala Leu Ala Asp Gly Met Gly Gly His Ala Ala Gly Glu Val
     42 Ala Ser Gln Leu Val Ile Ala Ala Leu Ala His Leu Asp Asp Asp Glu
                                55
     45 Pro Gly Gly Asp Leu Leu Ala Lys Leu Asp Ala Ala Val Arg Ala Gly
     48 Asn Ser Ala Ile Ala Ala Gln Val Glu Met Glu Pro Asp Leu Glu Gly
                        85
                                            90
     51 Met Gly Thr Thr Leu Thr Ala Ile Leu Phe Ala Gly Asn Arg Leu Gly
     54 Leu Val His Ile Gly Asp Ser Arg Gly Tyr Leu Leu Arg Asp Gly Glu
                                    120
     57 Leu Thr Gln Ile Thr Lys Asp Asp Thr Phe Val Gln Thr Leu Val Asp
                                135
                                                    140
     60 Glu Gly Arg Ile Thr Pro Glu Glu Ala His Ser His Pro Gln Arg Ser
     63 Leu Ile Met Arg Ala Leu Thr Gly His Glu Val Glu Pro Thr Leu Thr
                                            170
                        165
```

66 Met Arg Glu Ala Arg Ala Gly Asp Arg Tyr Leu Leu Cys Ser Asp Gly

**RAW SEQUENCE LISTING**PATENT APPLICATION: **US/10/564,975**DATE: 02/07/2007

TIME: 10:04:58

Input Set : A:\284602.sub.seq.list.081706.txt
Output Set: N:\CRF4\02072007\J564975.raw

67 180 185 69 Leu Ser Asp Pro Val Ser Asp Glu Thr Ile Leu Glu Ala Leu Gln Ile 200 72 Pro Glu Val Ala Glu Ser Ala His Arg Leu Ile Glu Leu Ala Leu Arg 215 75 Gly Gly Gly Pro Asp Asn Val Thr Val Val Ala Asp Val Val Asp 230 235 78 Tyr Asp Tyr Gly Gln Thr Gln Pro Ile Leu Ala Gly Ala Val Ser Gly 250 245 81 Asp Asp Asp Gln Leu Thr Leu Pro Asn Thr Ala Ala Gly Arg Ala Ser 260 265 84 Ala Ile Ser Gln Arg Lys Glu Ile Val Lys Arg Val Pro Pro Gln Ala 280 275 87 Asp Thr Phe Ser Arg Pro Arg Trp Ser Gly Arg Arg Leu Ala Phe Val 295 90 Val Ala Leu Val Thr Val Leu Met Thr Ala Gly Leu Leu Ile Gly Arg 310 315 93 Ala Ile Ile Arg Ser Asn Tyr Tyr Val Ala Asp Tyr Ala Gly Ser Val 325 96 Ser Ile Met Arg Gly Ile Gln Gly Ser Leu Leu Gly Met Ser Leu His 340 345 99 Gln Pro Tyr Leu Met Gly Cys Leu Ser Pro Arg Asn Glu Leu Ser Gln 360 102 Ile Ser Tyr Gly Gln Ser Gly Gly Pro Leu Asp Cys His Leu Met Lys 375 380 105 Leu Glu Asp Leu Arg Pro Pro Glu Arg Ala Gln Val Arg Ala Gly Leu 390 395 108 Pro Ala Gly Thr Leu Asp Asp Ala Ile Gly Gln Leu Arg Glu Leu Ala 405 410 111 Ala Asn Ser Leu Leu Pro Pro Cys Pro Ala Pro Arg Ala Thr Ser Pro 420 425 114 Pro Gly Arg Pro Ala Pro Pro Thr Thr Ser Glu Thr Thr Glu Pro Asn 435 440 117 Val Thr Ser Ser Pro Ala Ser Pro Ser Pro Thr Thr Ser Ala Pro Ala 460 455 120 Pro Thr Gly Thr Thr Pro Ala Ile Pro Thr Ser Ala Ser Pro Ala Ala 470 475 123 Pro Ala Ser Pro Pro Thr Pro Trp Pro Val Thr Ser Ser Pro Thr Met 485 490 126 Ala Ala Leu Pro Pro Pro Pro Gln Pro Gly Ile Asp Cys Arg Ala 127 500 129 Ala Ala 133 <210> SEQ ID NO: 2 134 <211> LENGTH: 382 135 <212> TYPE: PRT 136 <213> ORGANISM: Homo sapiens 138 <400> SEQUENCE: 2 140 Met Gly Ala Phe Leu Asp Lys Pro Lys Met Glu Lys His Asn Ala Gln

10

Thomas .

RAW SEQUENCE LISTING DATE: 02/07/2007
PATENT APPLICATION: US/10/564,975 TIME: 10:04:58

Input Set : A:\284602.sub.seq.list.081706.txt
Output Set: N:\CRF4\02072007\J564975.raw

```
143 Gly Gln Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp
146 Arg Val Glu Met Glu Asp Ala His Thr Ala Val Ile Gly Leu Pro Ser
149 Gly Leu Glu Ser Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly
152 Ser Gln Val Ala Lys Tyr Cys Cys Glu His Leu Leu Asp His Ile Thr
155 Asn Asn Gln Asp Phe Lys Gly Ser Ala Gly Ala Pro Ser Val Glu Asn
                                        90
158 Val Lys Asn Gly Ile Arg Thr Gly Phe Leu Glu Ile Asp Glu His Met
                100
                                    105
161 Arg Val Met Ser Glu Lys Lys His Gly Ala Asp Arg Ser Gly Ser Thr
           115
                                120
164 Ala Val Gly Val Leu Ile Ser Pro Gln His Thr Tyr Phe Ile Asn Cys
        130
                            135
167 Gly Asp Ser Arg Gly Leu Leu Cys Arg Asn Arg Lys Val His Phe Phe
                        150
                                            155
170 Thr Gln Asp His Lys Pro Ser Asn Pro Leu Glu Lys Glu Arg Ile Gln
                    165
                                        170
173 Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser Leu Ala
                                    185
176 Val Ser Arg Ala Leu Gly Asp Phe Asp Tyr Lys Cys Val His Gly Lys
           195
                                200
                                                    205
179 Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu Val His Asp Ile
       210
                            215
182 Glu Arg Ser Glu Glu Asp Asp Gln Phe Ile Leu Ala Cys Asp Gly
                        230
                                            235
185 Ile Trp Asp Val Met Gly Asn Glu Glu Leu Cys Asp Phe Val Arg Ser
                    245
188 Arg Leu Glu Val Thr Asp Asp Leu Glu Lys Val Cys Asn Glu Val Val
                260
                                    265
191 Asp Thr Cys Leu Tyr Lys Gly Ser Arg Asp Asn Met Ser Val Ile Leu
           275
                                280
194 Ile Cys Phe Pro Asn Ala Pro Lys Val Ser Pro Glu Ala Val Lys Lys
                            295
                                                300
197 Glu Ala Glu Leu Asp Lys Tyr Leu Glu Cys Arg Val Glu Glu Ile Ile
                        310
                                            315
200 Lys Lys Gln Gly Glu Gly Val Pro Asp Leu Val His Val Met Arg Thr
                    325
                                        330
203 Leu Ala Ser Glu Asn Ile Pro Ser Leu Pro Pro Gly Gly Glu Leu Ala
               340
                                    345
206 Ser Lys Arg Asn Val Ile Glu Ala Val Tyr Asn Arg Leu Asn Pro Tyr
                                360
209 Lys Asn Asp Asp Thr Asp Ser Thr Ser Thr Asp Asp Met Trp
                            375
       370
                                                380
213 <210> SEQ ID NO: 3
214 <211> LENGTH: 271
215 <212> TYPE: PRT
```

**RAW SEQUENCE LISTING**PATENT APPLICATION: **US/10/564,975**DATE: 02/07/2007

TIME: 10:04:58

Input Set : A:\284602.sub.seq.list.081706.txt
Output Set: N:\CRF4\02072007\J564975.raw

216 <213> ORGANISM: Mycobacterium tuberculosis 218 <400> SEQUENCE: 3 220 Ile Thr Arq Asp Val Gln Val Pro Asp Val Arg Gly Gln Ser Ser Ala 223 Asp Ala Ile Ala Thr Leu Gln Asn Arg Gly Phe Lys Ile Arg Thr Leu 226 Gln Lys Pro Asp Ser Thr Ile Pro Pro Asp His Val Ile Gly Thr Asp 229 Pro Ala Ala Asn Thr Ser Val Ser Ala Gly Asp Glu Ile Thr Val Asn 232 Val Ser Thr Gly Pro Glu Gln Arg Glu Ile Pro Asp Val Ser Thr Leu 70 235 Thr Tyr Ala Glu Ala Val Lys Lys Leu Thr Ala Ala Gly Phe Gly Arg 85 90 238 Phe Lys Gln Ala Asn Ser Pro Ser Thr Pro Glu Leu Val Gly Lys Val 100 105 241 Ile Gly Thr Asn Pro Pro Ala Asn Gln Thr Ser Ala Ile Thr Asn Val 244 Val Ile Ile Ile Val Gly Ser Gly Pro Ala Thr Lys Asp Ile Pro Asp 135 140 247 Val Ala Gly Gln Thr Val Asp Val Ala Gln Lys Asn Leu Asn Val Tyr 150 155 250 Gly Phe Thr Lys Phe Ser Gln Ala Ser Val Asp Ser Pro Arg Pro Ala 165 170 253 Gly Glu Val Thr Gly Thr Asn Pro Pro Ala Gly Thr Thr Val Pro Val 180 185 256 Asp Ser Val Ile Glu Leu Gln Val Ser Lys Gly Asn Gln Phe Val Met 195 200 259 Pro Asp Leu Ser Gly Met Phe Trp Val Asp Ala Glu Pro Arg Leu Arg 215 262 Ala Leu Gly Trp Thr Gly Met Leu Asp Lys Gly Ala Asp Val Asp Ala 235 265 Gly Gly Ser Gln His Asn Arg Val Val Tyr Gln Asn Pro Pro Ala Gly 245 ' 250 268 Thr Gly Val Asn Arg Asp Gly Ile Ile Thr Leu Arg Phe Gly Gln 260 - 265 272 <210> SEO ID NO: 4 273 <211> LENGTH: 271 274 <212> TYPE: PRT 275 <213> ORGANISM: Mycobacterium leprae 277 <400> SEQUENCE: 4 279 Asn Thr Arg Asp Val Gln Val Pro Asp Val Arg Gly Gln Val Ser Ala 10 284 Asp Ala Ile Ser Ala Leu Gln Asn Arg Gly Phe Lys Thr Arg Thr Leu 20 287 Gln Lys Pro Asp Ser Thr Ile Pro Pro Asp His Val Ile Ser Thr Glu 290 Pro Gly Ala Asn Ala Ser Val Gly Ala Gly Asp Glu Ile Thr Ile Asn 55

RAW SEQUENCE LISTING DATE: 02/07/2007
PATENT APPLICATION: US/10/564,975 TIME: 10:04:58

Input Set : A:\284602.sub.seq.list.081706.txt
Output Set: N:\CRF4\02072007\J564975.raw

293 294		Ser	Thr	Gly	Pro	Glu 70	Gln	Arg	Glu	Val	Pro 75	Asp	Val	Ser	Ser	Leu 80
296 297	Asn	Tyr	Thr	Asp	Ala 85	Val	Lys	Lys	Leu	Thr 90	Ser	Ser	Gly	Phe	Lys 95	Ser
	Phe	Lys	Gln	Ala 100		Ser	Pro	Ser	Thr 105		Glu	Leu	Leu	Gly 110		Val
	Ile	Gly	Thr 115		Pro	Ser	Ala	Asn 120		Thr	Ser	Ala	Ile 125	Thr	Asn	Val
	Ile	Thr		Ile	Val	Gly	Ser 135		Pro	Glu	Thr	Lys 140	_	Ile	Pro	Asp
	Val		Glv	Gln	Ile	Val		Ile	Ala	Gln	Lys		Leu	Asn	Val	Tyr
	145		-			150					155					160
311	Gly	Phe	Thr	Lys	Phe	Ser	Gln	Ala	Ser	Val	Asp	Ser	Pro	Arg	Pro	Thr
312					165					170					175	
314	Gly	Glu	Val	Ile	Gly	Thr	Asn	Pro	Pro	Lys	Asp	Ala	Thr	Val	Pro	Val
315				180	_				185		_		_	190	_	
	Asp	Ser		Ile	Glu	Leu	Gln		Ser	Lys	Gly	Asn		Phe	Val	Met
318	_	_	195	<b>~</b>	<b>~1</b>	20 - 1	<b>5</b> 1	200				<b>a</b> 1	205	<b>3</b>	<b>.</b>	3
	Pro	_	ьeu	ser	GIA	мет		Trp	Ата	Asp	АТА		Pro	Arg	ьeu	Arg
321	77-	210	C1	Tra	Th∝	C1	215	T 033	7 an	T 1/0	C1.,	220 Pro	7 02	77-1	7 cn	λľa
	225	Leu	GIY	пр	1111	230	vai	ьеи	Asp	пув	235	PIO	ASP	Val	ASP	240
		Glv	Sar	Gln	Hic					Туг		Δen	Pro	Pro	Δla	
327	Gry	Gry	SCI	GIII	245	ASII	A. 9	vai	AIG	250	0111	non	110	110	255	OL,
	Δla	Glv	Val	Asn		Asp	Glv	Tle	Tle		Leu	Lvs	Phe	Gly		
		0-7			9							-1-		1		
330				260					265					270		
330 333	<210	D> SI	EO II	260 NO:	: 5				265					270		
333		D> SI L> LI		NO:					265					270		
333 334	<21		ENGT	NO:					265					270		
333 334 335	<212 <212	l> Li 2> Ti	ENGTI (PE:	NO: H: 2' PRT	74	yneba	acte	cium		amio	cum			270		
333 334 335 336 338	<213 <213 <213 <400	l> LI 2> T 3> OI 0> SI	ENGTI (PE : RGAN : EQUE	NO: H: 27 PRT ISM: NCE:	74 Cory 5	•			glut							
333 334 335 336 338	<213 <213 <213 <400	l> LI 2> T 3> OI 0> SI	ENGTI (PE : RGAN : EQUE	NO: H: 27 PRT ISM: NCE:	74 Cory 5	•			glut			Gly	Leu	270 Pro	Gln	Gln
333 334 335 336 338 340 341	<213 <213 <213 <400 Ser 1	1> LF 2> TY 3> OF 0> SF Thr	ENGTI (PE: RGAN: EQUEN Ala	NO: H: 27 PRT ISM: NCE: Thr	Cory 5 Ser 5	Ala	Ile	Pro	glut Asn	Val 10	Glu			Pro	15	
333 334 335 336 338 340 341	<213 <213 <213 <400 Ser 1	1> LF 2> TY 3> OF 0> SF Thr	ENGTI (PE: RGAN: EQUEN Ala	NO: H: 27 PRT ISM: NCE: Thr	Cory 5 Ser 5	Ala	Ile	Pro	glut Asn	Val 10	Glu				15	
333 334 335 336 338 340 341 343 344	<211 <211 <211 <400 Ser 1 Glu	1> LH 2> TY 3> OH 0> SH Thr	ENGTI (PE: RGAN: EQUEI Ala Leu	PRT ISM: NCE: Thr	Cory 5 Ser 5 Glu	Ala Leu	Ile Gln	Pro Ala	glut Asn Ala 25	Val 10 Gly	Glu Phe	Val	Val	Pro Asn	15 Ile	Val
333 334 335 336 338 340 341 343 344	<211 <211 <211 <400 Ser 1 Glu	1> LH 2> TY 3> OH 0> SH Thr	ENGTI (PE: RGAN: EQUEI Ala Leu	PRT ISM: NCE: Thr	Cory 5 Ser 5 Glu	Ala Leu	Ile Gln	Pro Ala	glut Asn Ala 25	Val 10 Gly	Glu Phe	Val	Val	Pro Asn 30	15 Ile	Val
333 334 335 336 338 340 341 343 344 346 347	<211 <212 <213 <400 Ser 1 Glu	1> LH 2> TY 3> OH 0> SH Thr Ala Glu	ENGTH (PE: RGANI EQUEN Ala Leu Ala 35	PRT ISM: NCE: Thr Thr 20 Ser	Cory 5 Ser 5 Glu Ala	Ala Leu Asp	Ile Gln Val	Pro Ala Ala 40	glut Asn Ala 25 Glu	Val 10 Gly Gly	Glu Phe Leu	Val Val	Val Ile 45	Pro Asn 30	15 Ile Ala	Val Asn
333 334 335 336 338 340 341 343 344 346 347 349 350	<211 <212 <400 Ser 1 Glu Pro	l> LH 2> TY 3> OF 0> SF Thr Ala Glu Ser 50	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val	PRT ISM: NCE: Thr Thr 20 Ser Gly	Cory 5 Ser 5 Glu Ala Ser	Ala Leu Asp Glu	Ile Gln Val Ile 55	Pro Ala Ala 40 Arg	glut Asn Ala 25 Glu Gln	Val 10 Gly Gly	Glu Phe Leu Ala	Val Val Thr	Val Ile 45 Val	Pro Asn 30 Arg	15 Ile Ala Ile	Val Asn Thr
333 334 335 336 338 340 341 343 344 346 347 349 350	<211 <212 <400 Ser 1 Glu Pro	l> LH 2> TY 3> OF 0> SF Thr Ala Glu Ser 50	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val	PRT ISM: NCE: Thr Thr 20 Ser Gly	Cory 5 Ser 5 Glu Ala Ser	Ala Leu Asp Glu	Ile Gln Val Ile 55	Pro Ala Ala 40 Arg	glut Asn Ala 25 Glu Gln	Val 10 Gly Gly	Glu Phe Leu Ala	Val Val Thr	Val Ile 45 Val	Pro Asn 30 Arg	15 Ile Ala Ile	Val Asn Thr Met
333 334 335 336 338 340 341 343 344 346 347 349 350 352 353	<213 <213 <400 Ser 1 Glu Glu Pro Val 65	1> LH 2> TY 3> OH 0> SH Thr Ala Glu Ser 50 Ser	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val Thr	PRT ISM: ISM: Thr Thr 20 Ser Gly	Cory 5 Ser 5 Glu Ala Ser	Ala Leu Asp Glu Glu 70	Ile Gln Val Ile 55 Met	Pro Ala Ala 40 Arg	glut Asn Ala 25 Glu Gln Asn	Val 10 Gly Gly Gly	Glu Phe Leu Ala Pro	Val Val Thr 60 Asp	Val Ile 45 Val	Pro Asn 30 Arg Thr	15 Ile Ala Ile Gly	Val Asn Thr Met 80
333 334 335 336 338 340 341 343 344 346 347 349 350 352 353	<213 <213 <400 Ser 1 Glu Glu Pro Val 65	1> LH 2> TY 3> OH 0> SH Thr Ala Glu Ser 50 Ser	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val Thr	PRT ISM: ISM: Thr Thr 20 Ser Gly	Cory 5 Ser 5 Glu Ala Ser	Ala Leu Asp Glu Glu 70	Ile Gln Val Ile 55 Met	Pro Ala Ala 40 Arg	glut Asn Ala 25 Glu Gln Asn	Val 10 Gly Gly Gly	Glu Phe Leu Ala Pro	Val Val Thr 60 Asp	Val Ile 45 Val	Pro Asn 30 Arg	15 Ile Ala Ile Gly	Val Asn Thr Met 80
333 334 335 336 340 341 343 344 346 347 350 352 353 355 356	<211 <212 <400 Ser 1 Glu Glu Pro Val 65 Thr	1> LH 2> TY 3> OH 0> SH Thr Ala Glu Ser 50 Ser Leu	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val Thr	PRT ISM: NCE: Thr Thr 20 Ser Gly Gly Asp	Cory 5 Ser 5 Glu Ala Ser Arg	Ala Leu Asp Glu Glu 70 Ala	Ile Gln Val Ile 55 Met Arg	Pro Ala Ala 40 Arg Ile Ala	glut Asn Ala 25 Glu Gln Asn Leu	Val 10 Gly Gly Gly Ile Glu 90	Glu Phe Leu Ala Pro 75 Asp	Val Val Thr 60 Asp Val	Val Ile 45 Val Val	Pro Asn 30 Arg Thr	15 Ile Ala Ile Gly Ile 95	Val Asn Thr Met 80 Leu
333 334 335 336 340 341 343 344 346 347 350 352 353 355 356	<211 <212 <400 Ser 1 Glu Glu Pro Val 65 Thr	1> LH 2> TY 3> OH 0> SH Thr Ala Glu Ser 50 Ser Leu	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val Thr	PRT ISM: NCE: Thr Thr 20 Ser Gly Gly Asp	Cory 5 Ser 5 Glu Ala Ser Arg	Ala Leu Asp Glu Glu 70 Ala	Ile Gln Val Ile 55 Met Arg	Pro Ala Ala 40 Arg Ile Ala	glut Asn Ala 25 Glu Gln Asn Leu	Val 10 Gly Gly Gly Ile Glu 90	Glu Phe Leu Ala Pro 75 Asp	Val Val Thr 60 Asp Val	Val Ile 45 Val Val	Pro Asn 30 Arg Thr Ser Leu	15 Ile Ala Ile Gly Ile 95	Val Asn Thr Met 80 Leu
333 334 335 336 340 341 343 344 346 347 349 350 352 353 355 356 358 359	<211 <212 <400 Ser 1 Glu Pro Val 65 Thr	1> Li 2> TY 3> OF 0> SF Thr Ala Glu Ser 50 Ser Leu Gln	ENGTH YPE: RGAN: EQUEN Ala Leu Ala 35 Val Thr Glu Asn	PRT (SM: NCE: Thr Thr 20 Ser Gly Asp Val 100	Cory Ser Ser Glu Ala Ser Arg Ala 85 Arg	Ala Leu Asp Glu Glu 70 Ala Glu	Ile Gln Val Ile 55 Met Arg Glu	Pro Ala Ala 40 Arg Ile Ala Thr	glut Asn Ala 25 Glu Gln Asn Leu Ser 105	Val 10 Gly Gly Gly Ile Glu 90 Asp	Glu Phe Leu Ala Pro 75 Asp	Val Thr 60 Asp Val Val	Val Ile 45 Val Val Gly Glu	Pro Asn 30 Arg Thr Ser Leu Ser	15 Ile Ala Ile Gly Ile 95 Gly	Val Asn Thr Met 80 Leu Leu
333 334 335 336 340 341 343 344 346 347 350 355 356 358 359 361 362	<213 <213 <400 Ser 1 Glu Glu Pro Val 65 Thr Asn	1 > Li 2 > TY 3 > OF 3 > OF Thr Ala Glu Ser 50 Ser Leu Gln Ile	ENGTH YPE: RGAN: RGAN: EQUEN Ala Leu Ala 35 Val Thr Glu Asn Asp 115	PRT (SM: NCE: Thr Thr 20 Ser Gly Asp Val 100 Gln	Cory Ser Ser Glu Ala Ser Arg Ala 85 Arg	Ala Leu Asp Glu Glu 70 Ala Glu Pro	Ile Gln Val Ile 55 Met Arg Glu Glu	Pro Ala Ala 40 Arg Ile Ala Thr Ala 120	glut Asn Ala 25 Glu Gln Asn Leu Ser 105 Gly	Val 10 Gly Gly Gly Ile Glu 90 Asp	Glu Phe Leu Ala Pro 75 Asp Asp Glu	Val Thr 60 Asp Val Val	Val Ile 45 Val Val Gly Glu Val 125	Pro Asn 30 Arg Thr Ser Leu Ser 110 Val	15 Ile Ala Ile Gly Ile 95 Gly Gly	Val Asn Thr Met 80 Leu Leu Ser
333 334 335 336 340 341 343 344 346 347 350 355 356 358 359 361 362	<213 <213 <400 Ser 1 Glu Glu Pro Val 65 Thr Asn	1 > Li 2 > TY 3 > OF 3 > OF Thr Ala Glu Ser 50 Ser Leu Gln Ile	ENGTH YPE: RGAN: RGAN: EQUEN Ala Leu Ala 35 Val Thr Glu Asn Asp 115	PRT (SM: NCE: Thr Thr 20 Ser Gly Asp Val 100 Gln	Cory Ser Ser Glu Ala Ser Arg Ala 85 Arg	Ala Leu Asp Glu Glu 70 Ala Glu Pro	Ile Gln Val Ile 55 Met Arg Glu Glu	Pro Ala Ala 40 Arg Ile Ala Thr Ala 120	glut Asn Ala 25 Glu Gln Asn Leu Ser 105 Gly	Val 10 Gly Gly Gly Ile Glu 90 Asp	Glu Phe Leu Ala Pro 75 Asp Asp Glu	Val Thr 60 Asp Val Val	Val Ile 45 Val Val Gly Glu Val 125	Pro Asn 30 Arg Thr Ser Leu Ser 110	15 Ile Ala Ile Gly Ile 95 Gly Gly	Val Asn Thr Met 80 Leu Leu Ser

VERIFICATION SUMMARY

DATE: 02/07/2007

PATENT APPLICATION: US/10/564,975

TIME: 10:04:59

Input Set : A:\284602.sub.seq.list.081706.txt
Output Set: N:\CRF4\02072007\J564975.raw

L:16 M:270 C: Current Application Number differs, Replaced Current Application Number L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date